

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. **(currently amended)** A scintillator consisting of a crystal of $\text{Pr}_{1-x}\text{Ce}_x\text{F}_3$ ($0 < x < 0.5$) in which $0 < x < 0.5$.

2. **(currently amended)** The scintillator according to claim 1, characterized in that wherein $0.03 < x < 0.2$.

3. **(currently amended)** The scintillator according to claim 1, characterized in that wherein said crystal is grown by the a micro pulling down method, a Czochralski method, the a floating zone method, or a Bridgman method.

4. **(previously presented)** A radiation detector consisting of a combination of the scintillator according to claim 1 and a light responding means.

5. **(currently amended)** A radiation inspecting device having the comprising a radiation detector according to claim 4 as the radiation detector consisting of a combination of the scintillator of claim 1 and a light responding means.

6. (currently amended) The radiation inspecting device according to claim 5, ~~characterized in that~~ wherein said radiation inspecting device is an X-ray CT scanner.

7. (currently amended) The radiation inspecting device according to claim 5, ~~characterized in that~~ wherein said radiation inspecting device is PET (positron emission tomography).

8. (currently amended) The radiation inspecting device according to claim [[5]] 7, ~~characterized in that~~ wherein said PET (positron emission tomography) is two-dimensional type PET, three-dimensional type PET, time-of-flight (TOF) type PET, depth-of-image (DOI) type PET, or a combination type thereof.

9. (currently amended) The radiation inspecting device according to claim 5, ~~characterized in that~~ wherein said radiation inspecting device is a single device, or a combination type with any one or two of MRI, CT or SPECT, ~~or with two of them~~.

10. (currently amended) The scintillator according to claim 2, ~~characterized in that~~ wherein said crystal is grown by the a micro pulling down method, a Czochralski method, the a floating zone method, or a Bridgman method.

11. (previously presented) A radiation detector consisting of a combination of the scintillator according to claim 2 and a light responding means.

12. (previously presented) A radiation detector consisting of a combination of the scintillator according to claim 3 and a light responding means.